

# JACG 74CE

NEWSLETTER  
Vol. 2 No. 6

Feb. 1983

Single Copy

Price \$1.00

THE JERSEY ATARI COMPUTER GROUP

## Special Printer Issue

From the Editor's Desk ...

I am excited about this issue of the JACG Newsletter!! This is my first theme issue and it is entirely devoted to printer-related material. In these pages you will find information on Epson printers, old and new and the C. Itoh printer. Helpful tips and review articles on word processors like Text Wizard and Letter Perfect. There is a program for printing labels, a review of a friction feed substitute and technical articles on operating a printer off the Joystick ports and using a serial printer.

For those of you who want to contribute to the Newsletter, see the information for contributors, elsewhere in this issue. Starting in March, I will be adding at least three new regularly scheduled columns to this paper. There will be a Q&A column for beginners, a game review column and a JACG library column (disk and tape). Also, I am thinking of writing a regular educational software column unless I can get a volunteer to do it. How about it? Preferably, the person writing this column should either have one or more children or at least access to youngsters in order to help review or "kid-test" the software.

Here is some miscellaneous info: To see an interesting message in the Super Breakout game, press control-shift-I at the same time. In missile command, pressing control-T toggles a supposed track ball option that Atari designers put in the game. Unfortunately, this "option" is not compatible with the Wico track ball. From Bill Frank of H.A.C.E. comes this little tidbit - Want a lowcost storage box for your game cartridges? Then go to the supermarket and buy a 2 lb. box of Velveeta cheese. Dispose of the "cheese" and the remaining box will hold up to 9 carts. Thanks Bill.

Last minute Atari 1200 news. The memopad mode has been replaced with the Atari logo. There are 4 new graphic modes in BASIC. Although still using the GTIA, the modes are 8-15. Finally, from the official Atari press release on the 1200XL: "The model 1200XL is perhaps the first computer specifically designed for the home as an attractive item of furniture to fit into any decor." Hey, are we talking designer computers here, or WHAT?

No PILOT or Poking Around column this month, back on schedule next month. The previously promised business report from the officers will also have to wait. Until next month, Happy computing from...

Arthur Leyenberger

### JACG MEMBERSHIP

The Jersey Atari Computer Group (JACG) invites you to become a member. Dues are \$15.00 per year and entitle the member to 1) Receive the monthly newsletter and when you join, receive back issues of the newsletter as available; 2) Purchase programs from the group's extensive tape and disk librarys at special rates; 3) Join special interest groups or form new ones; 4) Benefit from the expertise and experience of other Atari computer users; 5) Participate in group purchases of software at substantially reduced prices; 6) Receive a membership card that entitles the member to discounts at local computer stores; 7) Attend monthly meetings to learn about the latest hardware and software, rumors, and techniques for getting the most out of your Atari computer; 8) Submit articles and programs to the newsletter and give demos and presentations at the monthly meetings; 9) Participate in sale/swap activities with other members; and 10) Have a lot of fun.

If all of this sounds good then send a check or money order, payable to JACG, to:

Rick Olson  
5 Starling Drive  
Randolph, NJ 07869

Remember, receiving the JACG Newsletter is just one of the many benefits of being a member of JACG.

### 1983 MEETING SCHEDULE

All meetings are held on the second Saturday of each month in the Bell Labs Auditorium, Murray Hill, New Jersey. The meetings begin promptly at 10:00 a.m. and finish about noon. Dealer sales are permitted from 9:15 to 10:00 in the lobby, a general question and answer session occurs from 9:30 to 10:00, and a member sale/swap session takes place from 9:30 to 10:00 in the lobby (original software only).

Feb. 12, 1982  
March 12, 1983  
April 9, 1983  
May 14, 1983  
June 11, 1983  
July 9, 1983  
Aug. 13, 1983



AND NOW A WORD FROM THE PRESIDENT....

YOU HEARD IT HERE FIRST: One of the original developers of the Atari 800, whose agreement not to come out with any peripherals for the 800 expires in October 1983, will come out with a super new peripheral the last quarter of '83. Intriguing rumor, huh?

The new Epson FX-80 printer will have the following features: 160 cps speed, 11x9 font with 18x18 capability, 96 ASCII and 7 international characters, redefinable control codes, proportional spacing, nonadjustable tractor. Options will include an adjustable tractor, roll paper capability, 2K buffer (available to the printer or the user) and a 6K buffer. Retail price to be \$570-600. Will there be a "speed up" kit for existing MX-80s? All in favor, say "aye"!

On to other items of importance to JACG members.... By the time you read this, the executive committee of JACG will have met to discuss a number of things that need resolution. As those of you who were at the January meeting are well aware of, we filled the 400 seat auditorium to overflowing and need to address the problem of attendance restrictions or finding a larger, suitable meeting place. In addition we need to look at our overall handling of finances and planning. We will also, as the membership voted, look into how we handle group purchases of hardware and software at discounted prices. Drawing up a suitable set of by-laws is also on our agenda. As you can see from all of this, we are quite busy trying to keep JACG in good working condition for the benefit of all.

Because we are now so large and, therefore, must have meetings that are either general in nature or specific to the point of not appealing to all. Both approaches will be made in the future. In order for members to learn more about specific areas of interest, I have been strongly encouraging the formation of Special Interest Groups (SIGs). All that is needed is a few members with similar interests to decide to meet on their own to delve more deeply into some specific area of computing (FORTH, telecommunications, assembly language programming, etc.). Some progress has been made in forming SIGs for FORTH and PILOT. Contact Jim Stanard for more information on the FORTH SIG and Curt Springstead for the PILOT SIG. If you want to form a group about another area, put a notice in our newsletter through the editor, Art Leyenberger.

I want to go on record as strongly endorsing the RAMROD Operating System board that I demonstrated at the January meeting. It is a very intriguing piece of hardware with a lot of potential. Just the speedup of the cursor and the ability to eliminate the keyboard "click" are probably worth the price. I'm sure as time goes by that many clever changes will be suggested that can easily be added to your modified O.S. The SUPERMON monitor also looks like a nice part of this system. Note, however, that you cannot have both the SUPERMON and the extra 4K of RAM in use at the same time. I also was very pleased with the EPROM programmer that I had on loan which was made by Creative Firmware in Texas. It comes with a nicely interactive piece of software to allow you to easily read ROMs and EPROMs, modify the coding and write it back onto other EPROMs. The best part, however, was the price. At \$79 for the unit and \$15 for the personality plug-in to handle 2732 EPROMs, it really is a bargain. Note, however, that this

is a kit, although a pretty easy one to solder together. Note also that you will need some sort of EPROM programmer in order to take full advantage of the RAMROD board. I would say that these items will definitely not be of great value to the casual user, but to anyone who is past that stage, the potential value is there.

Richard Kushner - JACG President



# ATARI SERVICE

FACTORY AUTHORIZED NETWORK

**tara** Electronics 526-  
985 Rt. 202  
Somerville 2110

## ONE DAY SERVICE

### THE JANUARY MEETING

Apparently, we have not yet reached our peak in membership. For our January meeting we had an overflow crowd in the auditorium that seats 400! The pre-meeting swap and sell time was again well received and pretty well kept in order. Our secretary, Ed Picciuti, and our treasurer, Rick Olson, we kept trapped in the corners trying to respond to the onslaught of new and prospective members.

We began our regular meeting with reports that we had 224 members as of a week ago and more than \$2500 in the treasury. Our newsletter editor, Art Leyenberger, reported as to what format he would like used for articles to be included in the newsletter.

The president, Dick Kushner, then reported on some of the latest news. The new Atari prices (\$199 for the 400 and \$499 for the 800) resulted in grim looks from those who had gotten their computers a year ago. He also reported on a new 64K board that, with two 16K boards will give 96K of available memory (sort of). It was noted that future 800s will have the "cage" that currently holds the memory and operating system boards removed and all those goodies packed inside in a more "closed" configuration (i.e., less accessible). It was also rumored that Atari will drop the 400 shortly and replace it with a more expensive 600 in order to leave some price room at the bottom for the game machines. He then demonstrated the RAMROD operating system board by showing how it can be used to give the user the ability to boot up with any screen color desired, a faster cursor, a "silent" keyboard, different messages and other things. He also demonstrated the SUPERMON monitor that can be used in conjunction with the RAMROD board to provide a machine language monitor that can be called at any time during any program.

Continued on Page 10

# ANNOUNCING



## COMPUTER COURSES

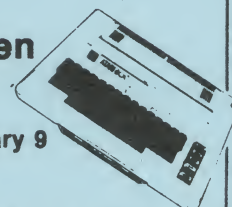
*designed and taught on three levels*

**I Adult • II Teenagers • III Children**

**I Adult - Introduction to Atari BASIC**

**6 Weeks • Wednesdays • 7-9 PM • Starting February 9**

**Instructor: Arthur Leyenberger Fee: \$100**



This course is designed for the person interested in learning the BASIC programming language on the Atari computer. For the person with either an Atari 400 or 800 computer, this course will provide the fundamental programming concepts that are necessary to program in BASIC. The first hour will be lecture, the second will be hands-on experience. The instructor will be available before and after class to answer individual questions. Homework assignments will be given and although not checked or graded, their completion will ensure that you get the most out of this course.

**II Teenagers - Beginning Course in BASIC**

**6 Weeks • Mondays • 7-9 PM • Starting February 7**

**Instructor: Dennis Hoskins Fee: \$100**

The course is intended for students (14-17 years old) interested in learning the fundamentals of Atari BASIC programming for use in school work and for personal enjoyment. The student will learn the meaning and use of the major BASIC commands and functions and to approach programming in an orderly and logical manner. The advanced graphics and sound capabilities of the Atari computer will be explored. The course is intended for those students with limited experience in BASIC programming.

**III Children - Beginning Course in BASIC**

**6 Weeks • Saturdays • 9-10:30 AM • Starting February 5**

**Instructor: Linda D'Ambola Fee: \$85**

This course is intended for students (8-13 years old). Course description is the same as for teenagers above, but geared to the younger student.

### CALL TODAY!

**Limited enrollment of 10 students for each course**

**EARTHRIS**

# COMPUTER CENTER

**6 GREEN VILLAGE ROAD • MADISON, N.J. 377-4084.**



Epson, the largest manufacturer of dot matrix printers, has recently announced two new printers and the temporary unavailability of the venerable MX-80F/T. First, the MX-70 series is being phased out. The low priced Epson printer will now be the MX-80T. Second, production of the MX-80 F/T has ceased and it will not again be available until March 1983. However, company sources say "It has not been abandoned!"

One of the "new" printers, the COMREX CR-1 Comwriter, is a letter-quality printer, operating at 18 characters per second (cps). This daisy-wheel-type printer offers 3 type fonts at 10, 12 and 15 pitch and retails for approximately \$825.00. Folks, this is nothing more than a Brother printer in a thin disguise.

The real news for us of the Atari ilk, is the second "new" printer. Billed as the FX-80, this baby is loaded with features. With an integral rear traction and friction feed mechanism, built in grafrax, 160 (count 'em) cps at 10 pitch and bi-directional, logic seeking print head, this printer will be difficult for the competition to beat. The cable connector is located on the side, so as not to interfere with paper feeding and the DIP switches are located behind a side hatch, rather than underneath, as on the MX-80.

Unfortunately, the FX-80 does not come with adjustable tractors (we're not talking farm machinery here) although an optional (extra cost) vertical tractor is available. The FX has a 2K buffer for printing or it can be used to hold auxiliary character set(s). An optional expander kit allows both. In the "Jeepers-creepers, where did you get those beepers department", there is an error buzzer for paper out error and not one, not two, but three separate and different audible tones for other internal errors. There is even supposed to be a capability for the printer to be remotely diagnosed for errors over a phone line.

The printer can be ordered with one of the following options: RS-232; IEEE-488; or Centronics interface. The price is supposed to be approximately \$50-\$60 more than the MX-80 F/T and it should be available in February 1983.

---

#### A PRINTER OFF THE ATARI JOYSTICK PORTS By Tom Olson - JACB

I am a new Atari computer enthusiast and am very interested in learning about all the great things that can be done with a home computer. I am also not one to rush out and put down a good sum of money on items until I am convinced of their utility. I therefore, invested the minimum in my system to see whether or not I could really find use for a computer around the house. I covered the book stores and discovered that they only demonstrated that one could make money writing a book on the subject. Some of the suggestions were really stretching the boundaries of practicality.

Have you ever tried to proofread a 10K program on a TV screen or spent hour after hour copying a program from a TV screen so you would have a permanent copy of a program? If you have, then you clearly understand how much I wanted a printer. An opportunity came along to buy one at a very good price. The problem was

that if I added the cost of an Atari Interface Module to the price of the printer, the cost was still prohibitive.

Along came an article in the February, 1981 Issue of COMPUTE that discussed very well what had to be done to bypass the interface module and connect the printer to joystick ports 3&4 on the front of the ATARI COMPUTER. With a simple software program, you can redirect the printer output from the normal side port to the joystick ports. All you have to do when you plan to use the printer for a session is to load this simple program and run it. The appropriate information is placed in a portion of memory that is not used for normal operations.

The printer connection is a parallel one so the more expensive RS232 Serial Printer is not necessary. The hardware required was a flat ribbon cable with an appropriate connector on the end to connect to your printer and a housing to hold 8 transistors which comprises the interface to the computer. The transistors are wired as shown below. The only problem I had was that the software program was written in assembly language format and I needed it in BASIC format so I could poke the data into memory using my BASIC cartridge. Therefore, I had to convert all the HEX numbers to decimal. To make it easy for you, I have included the converted program below.

---

#### Continued on Page 8

---

#### PAPER PORTER Reviewed by Stefan Burr - JACB

Most reviews here or in microcomputer magazines are of software or hardware, but this is a review of a sheet of plastic-- a very useful sheet of plastic, indeed. The Paper Porter is intended as a substitute for friction feed on a printer. And at under \$5, it's certainly a very inexpensive substitute.

Basically, the Paper Porter consists of a 9-1/2" by 17" sheet of Mylar with holes punched in the side so that it can be driven by the pins of an ordinary tractor-feed printer. Near the top is a pocket formed by another sheet; this pocket is made to hold an ordinary piece of paper, such as letterhead. Slip the top of the paper into the pocket, load the Paper Porter into the printer, and print what you want to on the paper. Of course, if you have more than one page to print, you do the same thing for each page.

This may sound a trifle awkward, but in practice it takes only a few seconds. Besides, with tractor feed, you also must perform a manual operation for each separate sheet you want to run through the printer. Although I haven't used tractor feed, it's hard to believe that the manual operations involved are much simpler than those for the Paper Porter.

In addition to the obvious use of printing on letterheads and the like, I have found it extremely useful for making Ditto masters. I teach computer science at the City College of New York, and I make up all my exams on my word processor. When a class is large, photocopying is too expensive, so I use a Ditto machine. The one small problem I have is that I want to print rather close to the top of the master. The plastic pocket overlaps the top of the page by one inch, so that if I used the Paper Porter as is, it wouldn't be possible to print above that

Continued on Page 13



"Where did I put that program that I had just modified?", I asked of no one in particular.

I had changed some of the statements to improve the performance and pretty up the output, saved it on disk and gone on to do other things. Now I was ready to use it and it was nowhere to be found! Thirty minutes later, after using DOS to search the directories of 40 disks, I found it.

"Is this any way to spend the little time that I have available to use my Atari?", I angrily muttered under my breath. "Why don't I take the time to write a program for printing labels to put on disk envelopes so that I will be able to find what is where at all times?"

Thus was born the following program. Like all programs, it went through numerous revisions, each an improvement on its predecessor. This version takes advantage of some features of the Epson Graftrax-Plus chip set and learning to use these features with the Atari is an important part of this story.

Graftrax-Plus is an enhanced version of the graphics chips for the Epson MX series printers. It replaces some less useful features of the previous version with some very useful features. Gone are the TRS-80 graphics characters and added are true underlining, superscript and subscript characters and the printing of inverse video letters as italics. (Now, if only Epson had proportional printing ..... but that's another story.)

My big interest was in using the superscript/subscript font to pack as many file names on a label as I could. By combining the very small superscript font and condensed print with the ability to reduce the spacing between lines, I reasoned that I could make labels with lots of file names and still have them readable. Also I would have a practical excuse for learning how to use these features of the Epson with my Atari.

Let's take up the use of the superscript/subscript font first. This font gives the same number of characters per line as regular printing, but only uses four of the nine pins in the printhead. It does not give a superscript that has a portion printed above the level of the rest of the printing, but there is no mistaking that it is indeed a superscript. Here's an example of how it looks:

SUBSCRIPTS AND SUPERSCRIPTS

with REGULAR PRINT;

SUBSCRIPTS AND SUPERSCRIPTS with CONDENSED PRINT

To achieve such nice print, the printer prints the superscripts in two passes, picking up different parts of the letters on each pass. You activate this feature (for superscripts) by using the command PRINT #3;CHR\$(27);CHR\$(83);CHR\$(0). It is strongly recommended that you use commands in the form PRINT #N; rather than LPRINT because of problems with the LPRINT command padding lines with spaces and messing up positioning. The PRINT #N; is preceded, of course, by an OPEN #N,8,0,"P:" to open a channel to the printer and followed, at the end of the program, by a CLOSE #N. CHR\$(27) is the ESCAPE code, which is used with many printer commands to warn the Epson that a control code is on the way. CHR\$(83);CHR\$(0) then puts the printer in the superscript mode (CHR\$(1) would have put it into the subscript mode). If you need to turn off the superscript/subscript mode, just use PRINT #N;CHR\$(27);CHR\$(84).

That takes care of getting into the superscript font. Next we need to address the problem of setting the line spacing. This, it turns out, is really two questions; how close together we want the lines to be

Originally, I had planned to write an Andy Rooney routine on word processors. Instead, I'll play it straight. My goal is that this article be an outline for the first time user of LJK's Letter Perfect (LP) word processor. I am using LP right now, I have only had the program for a month and I like it. However, the first few times I used the program I had fits. Hopefully, by sharing my experiences, you will be spared the hassles and your first attempt at using LP will be a successful one. Also, I will present information on using the disk printer editor to configure a printer driver for the NEC 8023 and C. Itoh 8510 printers.

First, LP does not use Atari DOS, consequently disks that have been formatted with DOS will not work with LP. So you must format a disk using the Format Disk option of the main menu. Before you even get to that point, there are a few things that first need attending to. For you folks like me who have the disk version of Letter Perfect, turn the computer off and the disk drive on, remove any cartridge from your computer and boot up the LP disk (not the disk marked disk printer editor - I'll get to that in a while) by inserting the LP disk into the disk drive, closing the door and switching the computer on.

You will now see a cryptic prompt: "<EADQ>". The E, A and Q represent Epson, Atari 825 (or Cenronics 737 or Cenronics 739), and Gume or Diablo printers, respectively. If you are using one of these printers, press the appropriate key, otherwise press D which stands for disk printer editor. For now, the best approach is to press D and then press return. The next two questions refer to which disk drive will contain your files and which will contain your database (if you are doing a mail merge). Since I only have one drive, I press return after each of these questions for the default option of 1 disk drive. At this point you will see the main menu. Now is the time to use the "<" or ">" keys to choose the Format Disk option if you have not already done so.

The "<" key scrolls the menu pointer up to the top of the screen and the ">" scrolls the pointer down to the bottom of the screen. When using either key and the top or bottom has been reached, the pointer wraps around to the opposite end of the menu. Once you have positioned the menu pointer to the desired selection, you must then press the return key to actually request that option.

Let's assume you have formatted a disk, this disk is now in your drive, and you are still looking at the main menu wondering what all this stuff means. The most often used menu options are Editor, Load, Save, Printer and Change Parameters. To get started using the program, position the menu pointer to the Editor option and press return. You are now faced with a blank screen. The first line of your text should always be a format line. The format line is begun with a control-F, (it will appear as inverse video) and it allows you to set margins, fonts, line spacing, headers and footers and other things. If you don't specify a format line, the program will use default values for all of these items (see page 33 of the LP manual for more information). I always use a format line because I want to know what the values of these options will be.



and what spacing can we use that will insure that we print the same place on each succeeding label. This second question is very important. Labels come stuck on a backing with a typical spacing from the top of one label to the top of the next of one inch. We are going to pack as much printing as we can on each label and it is very annoying if we have to manually readjust the head position because the printing has worked its way to the point where it is half on the label and half on the backing between labels. The Epson has a mode that allows you to control the line spacing in increments of 1/216 of an inch (how's that for fine control!). Playing around with the superscript printing, I first determined that using 14/216 of an inch line spacing would pack the absolute maximum on each label, while still being readable. My first attempt to use this spacing, however, pointed up the need to consider the label to label spacing.

The problem comes down to a consideration of the following boundaries on the problem: we want to pack as much as we can on a label (meaning we can't go to less than 14/216 and still be able to read the labels) and we don't want to go to more than 36/216 (or 1/6, which is the "normal" line spacing), and, whatever line spacing we choose must divide evenly into 216 so that we can have an integer number of lines in one inch. A little simple math shows that the only values we can use are 18, 24 and 36 and since 18 is the smallest, it was used. This gives twelve lines between labels (eleven on each label and one between labels), but I don't use the top line on each label because it is too much of a bother to line up the printhead with the labels to the accuracy needed to use this space. Each label will have a title line, thus leaving nine lines for filenames. I use 5" labels, which fit nicely on the disk envelopes and permit printing names four across (in condensed print mode) for a total of 36 per label. The program will move to the next label if you have more than 36 files on a disk and continue printing. Since this second label needs no title, there is room for 40 more files on it. Since the directory can only contain 64 files, two labels is the most you will ever need. If you don't like to stick labels on your disk envelopes (they are, after all, not that easy to peel off if you need to change the label), you can use the program to print on plain paper and then just tape the printout on the envelope or disk. In this case, just change line 137 to read

```
IF RECCTR = 40 THEN RECCTR = 0
```

If you don't have access to 5" labels, but instead can only get the more common 3.5" labels, make the following changes in the program: Change 4 to 3 in lines 60, 135 and 312; change 40 to 32 in line 137. You will then get 27 names on the first label with room for 30 names on the second label. On the rare occasion that you have more than 57 files on a disk, a third label will be needed.

The program must keep track of where you are in the count of labels and lines at all times in order to get properly positioned for the next label. This means that it must keep count of how many file names it is sending for each line of print and how many lines it has printed, so it knows how many lines to skip to get to the next label. The variables CTR and RECCTR keep track of these. They are reset to zero at the end of each line and the end of each label, respectively. The determination of when you are done with all the files on a disk is made by looking for the FREE SECTOR file which is the last one on the disk. B\$ is the string that contains the filenames as they are read off the disk directory. B\$(4,5) will be " F " if and only if the FREE SECTOR file has been

The JACG Newsletter seeks hardware and software reviews, tutorial articles, programs and any other information of interest to Atari computer users. Material should be sent to the Editor (see back page of this Newsletter for address) and conform to one of the following options:

1) LJK Letter Perfect files on disk, 2) 4-3/4 inch column, single-spaced, dark black ink, right justified, no printing on perforation and pica font (10 cpi), 3) same as option 2 except 3 inch column and condensed font (15-17 cpi), 4) Text Wizard Disk, 5) Microtext files on disk (We will be making Microtext available to JACG members at some future time, I think), 6) BASIC REM statements on disk, 7) same as option 6 only using tape. Anything else will not be accepted, especially hand written or non-justified type written. Figures should be in black ink and camera ready. The above options are numbered from 1 through 7. The lower the number of the option you choose in submitting items for the JACG newsletter, the better the Editor will like you and the sooner the item will appear in the newsletter.

The editor reserves the right to make changes to, and to accept or reject, submitted material.

```
5 REM ** STRING-TO-PRINTER DEMO **
6 REM ** for EPSON NX80 w/GRAFRAX+ **
10 DIM P$(120),D$(20)
20 LPRINT CHR$(15);CHR$(27);"A";CHR$(6);CHR$(27);"
S";CHR$(0)
30 TRAP 60:P$(1,1)=" ":P$(120)=P$:P$(2)=P$
40 FOR X=0 TO 4:V=20*X+1:READ D$:P$(V)=D$:NEXT X:L
PRINT P$:GOTO 30
60 LPRINT P$:TRAP 40000:END
70 DATA 1 - ONE,2 - TWO,3 - THREE,4 - FOUR,5 - FIV
E,6 - SIX,7 - SEVEN,8 - EIGHT,9 - NINE,10- TEN,11-
ELEVEN
80 DATA 12- TWELVE,13- THIRTEEN,14- FOURTEEN,15- F
IFTEEN,16- SIXTEEN,17- SEVENTEEN,18- EIGHTEEN
```

## JACG NEWSLETTER

The Jersey Atari Computer Group Newsletter will accept advertising on a first-come and space-available basis. Camera ready copy accompanied by payment must reach the Editor by the 20th day of the month preceding publication. JACG reserves the right to make decisions concerning placement of ads within the Newsletter.

## Advertising Rates

- a) Full Page 7 x 8-1/2 ... \$40.00
- b) Half Page ... \$25.00
- c) Quarter Page ... \$15.00

Annual rates available upon request.

Contact: Herb Lehner  
JACG

1375 Blair Ct.  
Bridgewater, NJ 08807  
(201) 582-2774 (days)  
(201) 725-9394 (eve.)



reached, at which point the program goes on to determine how many blank lines to print to get to the next label. It does this by using MARKER, which tells it how many lines have been printed.

It seemed to me that there had to be a better way than using so many counters to keep track of where you are. At one time I thought that I had even found such a way. The Epson allows you to set the "page" length to any number of lines and also to tell the printer to go to the top of the next page. Aha, I thought, this will make all this silly counting and incrementing unnecessary. But, alas, it was not to be. When I modified the program to tell the printer that a page should consist of one label (i.e., twelve lines) and then used the command that sends the printer to the top of the next page after it had finished a label, the printing on the labels shifted by a part of a line as each new label was printed. I don't have an explanation for this. My only supposition is that this command doesn't work to the same 1/216" accuracy that the linefeed command does. So much for being clever and figuring out the easy way to do things! As proof that all of this really works, see Figure 1, which shows a typical label.

I have used this program extensively to print labels for my disk envelopes and it has made finding programs much easier. The adventurous programmer might want to add a routine to alphabetize the names on each label, since there still are precious moments wasted in scanning a label with 30 or 40 names on it in order to find the particular filename of interest.

DISK = JAGG LIBRARY DISK #3

DOS	SYS 038	DUP	SYS 041	VOL3	DOC 005
DEM	DOC 009	FURTRADEGAM	045	RUSSIAN	GAM 008
MOON	DEM 014	SPACEARTDEM	009	KINETIC	DEM 012
RUNDEMOSDEM	001	FUNCPLOTDEM	006	MOSAIC	DEM 009
MLDEM01	DEM 006	MLDEM02	DEM 006	MLDEM03	DEM 008
PATTERN	DEM 004	CHANGE	DEM 009	INTERESTDEM	008
HOMESBUY	DEM 017	SCENBILDUTL	020	FUNCPLOTUTL	006
TEXTEDITUTL	003	HEXLOAD	UTL 007	AUTORUN	SYS 002

329 FREE SECTORS

```

1 REM *****
2 REM * SUPER DISK LABEL PROGRAM *
3 REM * BY DICK KUSHNER *
4 REM * HIGH BRIDGE, NJ *
5 REM *****
10 DIM B$(17),N$(40)
20 ? "):"? "LOAD PRINTER WITH LABELS.":?
21 ? "TURN ON PRINTER/B50 INTERFACE UNIT.":?
22 ? "INSERT DISKETTE INTO DRIVE #1.":?
23 ? "TYPE WHEN READY.":?
25 INPUT N$
28 TRAP 500
30 OPEN #7,8,0,"P:"
33 PUT #7,27:PUT #7,51:PUT #7,18
37 ? #7;CHR$(15);? #7;CHR$(27);CHR$(83);
40 CLOSE #2:? "ENTER DISKETTE NAME ( FOR END)":INPUT
N$
42 IF N$="" THEN CLOSE #2:CLOSE #7:END
45 X=0:N=0:CTR=0:RECCTR=0:INDEX=12
50 ? #7;" DISK = ";N$
60 RECCTR=RECCTR+4
100 OPEN #2,6,0,"D:*. *"
110 TRAP 30
120 TRAP 310:INPUT #2,B$
130 ? #7;B$;" ";CTR=CTR+1:RECCTR=RECCTR+1:IF CTR=4
THEN PRINT #7:CTR=0
135 IF B$(4,5)=" F" THEN 310
137 IF RECCTR=40 THEN PRINT #7:PRINT #7:RECCTR=0
140 GOTO 120
310 IF RECCTR=0 THEN GOTO 320
312 MARKER=INT(RECCTR/4)
316 FOR I=1 TO INDEX-MARKER:PRINT #7:NEXT I
320 GOTO 40
500 TRAP 40000:IF PEEK(195)=138 THEN 20
510 ? "ERROR #";PEEK(195);" AT LINE ";
PEEK(186)+256*PEEK(187):STOP

```

Ed. Note: An article similar to this will be published shortly in ANTIC Magazine. This article may not be reproduced or reprinted without the expressed permission of both the author and ANTIC.

#### Letter Perfect Margin Adjust Deciphered By W.A. Pavlik - JACG

Those of you who own LETTER PERFECT and have wondered if the manual was written by a group of semi-literate Latvian trolls who translated to the English by consensus of opinion take heart. It was; but I am a (an?) Ukrainian troll who stumbled across the true meaning of how to get the adjust margin instructions on pp.70-71 to work properly. The information is there but, like testimony at a trial, a few extra words would make things much clearer.

1. The following sequence of returns, format lines, and text must be followed exactly. It works for me.
2. Type your paragraph; hit return at its end; hit one and only one return; type your adjust margin format line again, with a return at the end; begin the next paragraph.

UTL	DOC 017
BOX	DEM 006
ROTATE	DEM 018
MARQUEX	DEM 008
PADDLES	DEM 007
INKBLOT	DEM 005
MARQUE	UTL 005
MENU	SYS 019

3. No extra "returns" are allowed before or after the reformatting lines. Doing so will cause you to grumble profusely. Paragraph 2 will do it. Try it; if it doesn't work then mof snowz kapop!

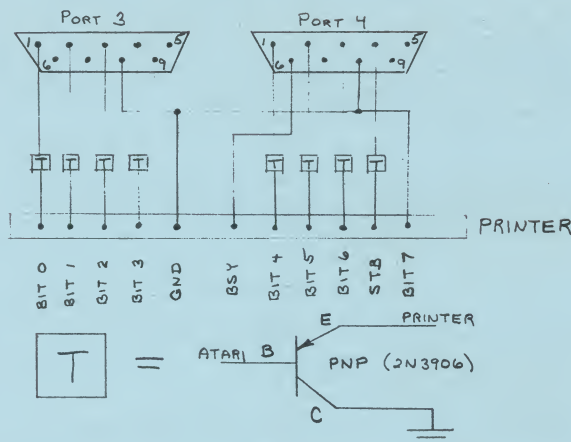
Now I wish I could figure out the ESCAPE CODES instructions on pp.44-45. If any of you have, please give me a call.

I like LETTER PERFECT very much, and DATA PERFECT is even better. But wait 'til you get to the DATA PERFECT directions which explain the difference between number and number. You see, one is and one isn't. OY! Such good programs deserve much better instructions.

+++++

SUPPORT THE BUSINESSES  
THAT ADVERTISE  
IN OUR NEWSLETTER

\*\*\*\*\*



The transistors must be as close as possible to the computer ports because of noise. I mounted my 8 transistors inside 1/2 of a 35mm slide holder that was just the right size to slide into the slot on the front of my 400 where the joystick ports are located. It turned out to be a compact package. The real good news is that the total interface cost me less than \$10. My printer price came into range!!! The only operational problem I have is that I must type PSR=USR(1761) and then RUN every time I use the SYSTEM RESET key.

If anyone is interested in trying this interface and can't get a copy of the Feb. 1981 Issue of COMPUTE, feel free to call.

```

6140 ADDR=1658
6150 FOR I=1 TO 4
6160 READ ATAD
6170 POKE ADDR,ATAD
6180 ADDR=ADDR+1
6190 NEXT I
6240 ADDR=1664
6250 FOR I=1 TO 15
6260 READ ATAD
6270 POKE ADDR,ATAD
6280 ADDR=ADDR+1
6290 NEXT I
6340 ADDR=1680
6350 FOR I=1 TO 111
6360 READ ATAD
6370 POKE ADDR,ATAD
6380 ADDR=ADDR+1
6390 NEXT I
6395 PSR=USR(1761)
6399 END
6400 DATA 32,244,6,76,143,6,168,6,222,6
6410 DATA 168,6,222,6,222,6,76,120,238
6420 DATA 169,48,141,3,211,169,255,141,1,211
6430 DATA 169,52,141,3,211,169,128,141,1,211
6440 DATA 160,1,96,169,13,201,155,208,2
6450 DATA 169,13,162,4,172,19,208,208,249
6460 DATA 202,208,248,160,128,9,128,141,1,211
6470 DATA 41,127,141,1,211,140,1,211,201,13
6480 DATA 208,14,162,128,202,208,253,169,79
6490 DATA 141,143,6,169,0,208,213,206,143,6
6500 DATA 240,200,208,195,104,165,2,141,126,6
6510 DATA 165,3,141,127,6,169,122,133,2,169,6
6520 DATA 133,3,169,128,141,27,3,169,6
6530 DATA 141,28,3,96

```

One aspect of computing I especially enjoy is having a sanctuary at my fingertips that allows me to meander through and explore and create. Kind of a tinker toy you might say. Get a particular idea and then set about picking up pieces of BASIC, put them together in different ways and see if and how they work. Such is the case of this short demo. I find that little demos often form the springboard to techniques used in programs written later on. Anyway, getting data formatted out to the printer can sometimes be a sticky task. I tried to incorporate a full variety of elements; alphabetized columns, text identified rows and right-justified numeric values from a matrix. When printing to the screen you can use the semi-colon to keep the cursor from dropping to the next line while you continue your PRINT command on the next logical line. I don't know of a way to inhibit the line feed between LPRINT statements. To circumvent this inherent restriction, the BASIC string can be preloaded and then passed on to the printer.

```

105 DIM M(5,10),D$(120)
110 REM ** Load a matrix with random values **
115 FOR X=1 TO 5:FOR Y=1 TO 10
120 T=INT(5000*(RND(0)))/100
125 M(X,Y)=T
130 NEXT Y:NEXT X
135 LPRINT CHR$(15)
140 D$(1,1)=" ":D$(120)=D$:D$(2)=D$
145 FOR Y=1 TO 10
150 REM ** Label column heads alphabetically. **
155 D$((10*Y)+2)=CHR$(64+Y)
160 NEXT Y
165 LPRINT D$
170 FOR X=1 TO 5
175 REM ** Clear out the string. **
180 D$(1,1)=" ":D$(120)=D$:D$(2)=D$
185 REM ** Load subject in column zero. **
190 READ D$
195 FOR Y=1 TO 10
200 REM ** Place value stored in matrix in respect
ive column, right justified. **
205 D$((10*Y)+(5-LEN(STR$(M(X,Y)))))=STR$(M(X,Y))
210 NEXT Y:LPRINT D$:NEXT X:END
225 DATA FIRST,SECOND,THIRD,FOURTH,FIFTH

```



# The New Standard

FOR ALL YOUR ATARI NEEDS!!!

## GEMINI



267-0988

400 COMPUTER (16K).....	\$199. <sup>95</sup>
800 COMPUTER (48K + BASIC) .....	\$499. <sup>95</sup>

## SOFTWARE 20-60% OFF LIST

WATCH FOR MONTHLY SPECIALS THRU-OUT 1983
--

## GEMINI GEMINI GEMINI

86 RIDGEDALE AVENUE, CEDAR KNOLLS, NEW JERSEY

STORE HOURS: MON- THU 9-6 FRI 9-8 SAT 9-4 CLOSED SUN

267-0988



The program chairman, Rich Rospond, then took over and reported on the results of the survey of members that he took at the last meeting. He then outlined his philosophy for program topics and then introduced two representatives from CompuServe, including Ron Luks, who is the SIG-Atari system operator for CompuServe. We were introduced to CompuServe and told its history and current configuration. Ron then got us on line and led us through some of the capabilities of the system, including access to the World Book Encyclopedia. He then gave us a tour of the Atari section, including a "live" conversation via computer with Greg

Leslie of the Oklahoma City Group, who happened to be on the system at the time. Ron also provided tips as to using the system for leaving messages and downloading programs from their files. There was a lot of interest in this service, especially when Ron mentioned that many of the program that appear in magazines are and will be on their files for downloading (and no typing by the user!!). CompuServe was kind enough to provide us with a few starter kits, one of which we gave away later in the meeting through a drawing open to all members present.

Rich Rospond then demoed Galahad and the Holy Grail. We then held two drawings using a random number generator program to pick the winner from a numbered membership list of JACG members. We gave away a disk copy of Sands of Egypt (with the requirement that we get a review for the newsletter) and a CompuServe starter kit that included five free hours of use.

#### INSTALLING A SERIAL PRINTER By Richard Rospond - JACG

If you do not currently own a printer, but can borrow one from work, or see one for sale in the newspaper, a little research is in order.

The one that I borrowed had an RS232-C interface on the back. By definition, this causes you to use a Serial Port on the 850 interface unit, not the parallel printer port. Physically there is only a difference of 10 pins (15 vs 25), but operationally there is a world of difference. Please note that all pins are never used in either configuration.

If you are going to buy a printer for normal use, believe me, there is no contest. Many programs such as Word Processors assume a parallel printer using the LPRINT command.

When going from a Serial Port you need an OPEN command, and an XIO command for line feed-carriage return. There is a list of other optional commands. LLIST and LPRINT do not work, instead you list or print to the opened port. Naturally this means that you must modify any program that had used the LPRINT statement.

In addition you must take into consideration the operation of your printer. This is not, and can not be covered in the 850 Users Manual. Following is the correct configuration for using a 43 Teleprinter.

Port #2(850)	RS232-C
Pin #1 DTR	#20 DTR
Pin #3 Send data	#3 Receive data
Pin #5 Ground	#6 Ground
Pin #6 DSR ready	#6 DSR ready

This satisfies the requirements of the 850 Interface, but I also had to connect 4&5 on the RS232 (clear to send-request to send) and wire #8 to #20 (line-signal).

ATARI support was of no help, and in all fairness, they can not know the requirements of all terminals in the marketplace. That is why they make a parallel printer.

Now the printer works fine using ATARI BASIC, but I also have Microsoft BASIC which uses a different OPEN statement, and does not have any XIO commands. Therefore the line feed must come from the printer or use CHR\$(10), which I did. Since my printer does not have auto line-feed, the programs will run, but I can not list the program because CHR\$(10) only works during execution.

If you can borrow or buy a printer at an extremely low price, then all this is worth the effort, but if you have your money out, parallel is the only way to go.

## WAYNE COMPUTER SOFTWARE

ATARI  
TRS-80  
VIC  
SINCLAIR



APPLE  
IBM  
TEXAS  
INSTRUMENTS

ATARI VIDEO CARTRIDGES  
**HUGE SELECTION • LOWEST PRICES**

**1459 Rl. 23 WAYNE • WAYNE TILE CENTER**  
**ACROSS FROM PACKANACK CENTER 628-7318**  
**OPEN TUES.-FRI. 10-6. THURS. 10-8, SAT. 10-5**

#### A Quick Mailing List By George Hamilton

So you think you need a word processor to do a mailing list. Well, here is a short way of doing it without all the frills (sorting, formatting, etc.). Besides the computer, all you need is a tape or disk drive, a printer, and a box of labels.

Here it is:

```
10 LPRINT " NAMES"
20 LPRINT " STREET"
30 LPRINT " CITY,STATE,ZIP"
40 LPRINT
50 LPRINT
60 LPRINT
```

If the address contains three lines then you need three LPRINT lines following it. If the address contains four lines, then 2 following LPRINT lines are needed. The total number of LPRINT lines should be six.



# Epson MX80 Printer Command Summary

## By Graham Van Slyke

The following was compiled to serve as a quick reference chart when programming or translating Epson printer control commands. It is not a complete list, but does include the more commonly used commands.

The following was compiled to serve as a quick reference chart when programming or translating Epson printer control commands. It is not a complete list, but does include the more commonly used commands.

```
===== EPSON MX80 PRINTER COMMAND SUMMARY =====
```

FUNCTION	STANDARD COMMAND	GRAFTRAX COMMAND	GRAFTRAX+ COMMAND
Emphasized on	ESC;"E"	ESC;"E"	ESC;"E"
Emphasized off	ESC;"F"	ESC;"F"	ESC;"F"
Double Strike on	ESC;"G"	ESC;"G"	ESC;"G"
Double Strike off	ESC;"H"	ESC;"H"	ESC;"H"
Compressed on	CHR\$(15)	ESC;"P"	CHR\$(15)
Compressed off	CHR\$(146)	ESC;"Q"	CHR\$(146)
Expanded (one line)	CHR\$(14)	CHR\$(14)	CHR\$(14)
Expanded on	N/A	ESC;"S"	ESC;"M";CHR\$(1)
Expanded off	N/A	ESC;"T"	ESC;"W";CHR\$(0)
Italics on	N/A	ESC;"A"	ESC;"A"
Italics off	N/A	ESC;"S"	ESC;"S"
Line Feed	CHR\$(10)	CHR\$(10)	CHR\$(138)
Form Feed	CHR\$(140)	CHR\$(12)	CHR\$(140)
Reset Printer	N/A	ESC;"0"	ESC;"0"
Set H Tabs	ESC;"D";CHR\$(n1+128);CHR\$(nn+128);CHR\$(128)	ESC;"D";CHR\$(n1);.....;CHR\$(nn);CHR\$(255)	ESC;"D";CHR\$(n1);.....;CHR\$(nn);CHR\$(0)
H Tab	CHR\$(137)	CHR\$(9)	CHR\$(8)
Set V Tabs	ESC;"B";CHR\$(n1+128);CHR\$(nn+128);CHR\$(128)	ESC;"B";CHR\$(n1);.,;CHR\$(nn);CHR\$(255)	N/A N/A
V Tab	CHR\$(139)	CHR\$(11)	CHR\$(139)
Set Form Length	ESC;"C";CHR\$(n) (Default/max=66)	ESC;"C";CHR\$(n) (Default/max=255)	ESC;"C";CHR\$(n) (Def=66/max=127)
Set Line Spacing (n/72")	ESC;"A";CHR\$(n+128);ESC;CHR\$(2) (max=85)	ESC;"A";CHR\$(n) (max=85)	ESC;"A";CHR\$(n) (max=85)
9/72" Line Spacing	ESC;"0"	ESC;"0"	ESC;"0"
7/72" Line Spacing	ESC;"1"	ESC;"1"	ESC;"1"
12/72" Line Spacing	ESC;"2"	ESC;"2"	ESC;"2"
Set Line Spacing (n/216")	N/A	ESC;"3";CHR\$(n) (max=255)	ESC;"3";CHR\$(n) (max=255)
Turn Underline on	N/A	N/A	ESC;"-";CHR\$(1)
Turn Underline off	N/A	N/A	ESC;"-";CHR\$(0)
Superscript on	N/A	N/A	ESC;"^";CHR\$(0)
Subscript on	N/A	N/A	ESC;"_";CHR\$(1)
S/Script & UDP off	N/A	N/A	ESC;"T"
S/Script & DS off	N/A	N/A	ESC;"H"
Unidirectional on	N/A	N/A	ESC;"U";CHR\$(1)
Unidirectional off	N/A	N/A	ESC;"U";CHR\$(0)

NOTE: ESC may be entered as CHR\$(27) or "[ESC][ESC]"

Another short program demonstrates how text can be formatted into a string and printed. Just for illustration sake the printer was set up for compressed superscript. Just what you needed to make up those wallet sized directories. Note that a separate string variable (D\$) is required for the READ/DATA function, followed by placement of its contents into the appropriate substring (P\$) location. Don't forget to provide a trap if there's a chance that you'll run out of data to fill the main string.

10 REM \*\* \*\* \*\* \*\*

```
11 REM ** FOR EPSON MX80 w/GRAFTRAX+ **
```

12 REM \*\* SETTING THE COLUMN WIDTH \*\*

13 REM \*\* by GRADAN VAN SLYKE - JACG \*\*

14 REM \*\* \*\* \*\* \*\*

```
13 REM ** You can readily list a program you would
like to submit for the newsletter by presetting
the printer *
```

```
16 REM ** for a 3-inch column using the ESCAPE Q
    command. Use condensed print to make the most of
    it. **
```

```
17 REM ** Use double strike to make it dark as
possible. **
```

```
30 REM ** precondition printer as follows **
```

```
40 REM ** LPRINT CHR$(15); CHR$(27); "Q"; CHR$(50);  
CHR$(27); "6" **
```

```
50 REM ** then LIST "P" **
```

```
60 REM ** THIS IS AN EXAMPLE OF A VERY, VERY, VERY  
    , VERY, LOOOOONNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN STATE-  
MENT LINE **
```

62 REM \*\* The value that follows the ESC Q is specified as the desired column width in terms of # of characters \*\*

63 REM \*\* e.g. at 10cpi 3" is 30, at 16.5cpi simply multiply 30 by 1.65 (=49.5) rounded to 50. \*\*

64 REM \*\*\*\*\* NOTE: WHEN USING 16.5 CPI \*\*\*\*\*

65 REM \*\* For proper results place the compressed  
print command before the column width command. \*\*

70 REM \*\* Note that inverse video prints out in  
ITALICS. \*\*

	A	B	C	D	E	F	G	H	I	J
FIRST	9.35	28.57	33.55	35.89	39.81	18.33	23.13	19.95	26.94	13.75
SECOND	26.46	18.86	41.31	24.78	1.13	48.45	2.36	49.71	7.07	18.42
THIRD	20	24.56	29.22	36.79	44.02	11.25	48.51	31	46.88	4.43
FOURTH	14.09	11.36	34.94	1.65	36.03	31.3	47.71	41.28	32.66	48.17
FIFTH	18.91	43.01	35.87	29.84	18.62	9.47	18.03	25.01	13.7	33.59

1 - ONE  
6 - SIX  
11 - ELEVEN  
16 - SIXTEEN

2 - TWO  
7 - SEVEN  
12- TWELVE  
17- SEVENTEEN

3 - THREE  
8 - EIGHT  
13- THIRTEEN  
18- EIGHTEEN

4 - FOUR  
9 - NINE  
14- FOURTEEN

5 - FIVE  
10 - TEN  
15 - FIFTEEN



I will mention just a few options and their values to get you started. Assume your paper is 8-1/2 inches wide and you want a one inch left and right margin. Also, you will be using pica print (which is 10 characters per inch or 10 pitch). You should then specify the left margin (m) as 10 and the line width (w) as 65. Remember, 10 characters/inch, so a one inch left margin equals 10 characters. Likewise, a 65 character width will be equal to 6-1/2 inches. There is no need to specify the right margin since what ever remains from 8-1/2 inches automatically becomes the right margin.

Another useful option is line spacing (l). Line spacing may be from 1 to 5 lines. For term papers, business reports and articles submitted to magazines, use a line spacing of 2. For articles submitted to this newsletter, use a line spacing of 1. Finally, if you want your text printed with right justification (as in this newsletter) then use the justify option (j) with a value of 1. A value of 0 means no justification. These options and all others are specified by pressing the lower case letter representing the option followed by the value. The following is the above mentioned format line as it would appear as the first line of your LP file. (The underlined F represents a control-F).

Em10w65l1j1

Be sure to press return after this first line. You are now ready to begin typing. Just remember that unlike a typewriter where you press return after each line, in LP you just keep on typing and only press return at the end of a paragraph or where you want to end a specific line on the printer. Once you have finished typing your text or about every five minutes worth of work, you should press the escape (ESC) key which will bring you back to the main menu. Then, position the menu pointer to the Save option, and press the return key. Now type a file name of up to 8 characters in length. You can not use a file name extension because Letter Perfect automatically puts an ".LP" at the end of your specified name. After the file has been saved, LP places you back at the main menu. Loading a file from disk is done in a similar way. Don't forget, when you are in the Editor mode, pressing the (ESC) key brings you back to the main menu and when you are in the main menu mode, you make your menu selection via the "<" or ">" keys and then pressing return.

So far I have talked about the main menu, the Editor mode, and loading and saving files. I will now discuss how to print your text on your printer. First, configure the disk printer editor with the specific codes that are required by your printer. It is a relatively straight forward procedure. What you are doing is setting up a little file on your disk (the disk that will hold all of your text files). The print driver tells LP what ASCII codes to send to your printer to do specific things. For example, on my C. Itoh printer the underline-on and underline-off codes are 27,88 and 27,89, respectively. Once this has been specified to LP I simply use a control-U to toggle the underline on and off within my text.

Now that you know what you are doing, let me briefly tell you how to do it. Boot up the Disk Printer Editor Disk and answer the question as to what type of printer you have (read pages 76 through 88 in the LP manual at least once before you attempt to do this).

Note that item 5, NEC, refers to the NEC Spinwriter printers, not the NEC 8023 dot matrix printer. Generally, the way this process works is for you to select a numbered option, press the return key and then change or enter the values associated with that printer function. You then press the return key to save those values and continue.

When the main menu comes up I select option 6 because I have a C. Itoh 8510 Prowriter printer. I am then given an opportunity to change some default values concerning things like margin, type fonts, etc. Pressing return instead of an option number brings up the next questions. I then accept the default values for double width printing and backspace character by pressing return twice. The program then asks for boldface on/off and underline on/off. I respond with the codes - 27,33/27,34 and 27,88/27,89, respectively. I now press return and come to the font questions. Up to four fonts may be described and they are numbered 0 through 3. The following are the fonts I can use on my printer and their codes: Pica (10 pitch) - 27,78; Elite (12 pitch) - 27,69; Condensed 17 pitch) - 27,81; and Proportional - 27,80. I press return once more and then I make sure my file disk is in the disk drive. The I press shift-3, which records the above information on the disk and returns me to the Disk Printer Editor main menu once again. At this point I could configure another printer driver but I would have to answer all of the questions all over again. It would have been nice if my previously entered values remained, allowing me to modify just what I need to in order to configure another printer driver. By the way, only one print driver may be stored on each side of the disk.

When you are finished with the Disk Printer Editor, you'll want to return to the Letter Perfect program to actually print the masterpiece. To do this, insert your LP disk in the drive and select menu option 7 (exit) and follow the instructions. When the prompt (EADQ) appears, insert your file disk containing the printer driver, press D and then press shift-3. This will load the printer driver. For a one-drive system, press return twice and select the Load menu option. When LP requests it, type in your text file name and press return. You can now go back to the Editor mode to add, delete or modify your text or, if you want to print it, select the Printer menu option. Press return twice, adjust the paper and press return again. Your text is now printing on your printer. If not, ensure that your printer is on, it is in the select mode, it is connected correctly to the 850 interface, the interface is on and connected correctly to your Atari computer.

This article may have seemed a bit long-winded but had I the advantage of reading the information contained herein when I first started using LP, I would have saved myself many hours of frustrating trial and error activity. There is much I have not covered in this article but this outline should at least get you started. The bells & whistles can come later. I am still learning too. As yet I can't do sub- and superscripting, enlarged (double-width) print, and right justified proportional printing. I also seem to have trouble with my paging when I alter the top and bottom margins when using a header.

If anyone out there in Atari user land can help me with these problems, please contact me and give this tired old editor a break.



## TEXT WIZARD CRIB SHEET

by Bill Hough - JACG

Word processing was not an intended application for our home computer when the initial list of selection criteria was assembled. I was used to, and perfectly happy using, a line editor I had mastered at work. Capability to operate as a home terminal with that editor at the office, and consequently lower-case capability, was an initial requirement. In fact, this was the principal reason we settled on the ATARI.

After a while, I realized that much of the text formatting I saw in user's group newsletters, such as J.A.C.G.s, looked better than mine. I had somehow accumulated a disk drive and a printer capable of proportional printing along the way. Also, my wife sometimes expressed annoyance when she had needed the phone and it was busy doubling as a data link to the mini downtown. So the time came to consider one of the self-contained word processors.

I first looked at the ATARI offering. Quite honestly, it seemed to be terribly complicated for a sometimes user to master. It had a couple of things I found downright objectionable. One was the redefinition of screen-editor functions. The keying sequences I had down pat for writing and editing programs all of a sudden did different things. Also, I wasn't able to take a regular text file, from a bulletin board for example, and edit and format it with the ATARI Word Processor. I became quite discouraged, and decided I really didn't need a self-contained word processor.

I mentioned my disappointment to the editor of the Pittsburgh A.C.E. newsletter. He suggested that I look at Text Wizard from DATASOFT. What a pleasant surprise. Not only was it much simpler to use, it left the screen editor intact and could deal with any text or program file. I even built a short BASIC program to translate a file assembled with the line editor or taken from a bulletin board into Text Wizard's format. This simply involves trading carriage-returns within a paragraph for spaces and the paragraph formatting instruction for a couple of carriage-returns.

There are still a lot of commands to remember. Therefore an early task to which my own Text Wizard was put was to build a crib sheet for itself. This crib sheet is not a substitute for the well written and complete instruction manual, but something I can glance at to recall a seldom used command. I find it more convenient than the card that comes with Text Wizard; if you cut it between the columns, it fits nicely on the two sides of a disk envelope. I tape a copy to each of the work disk jackets that I use with Text Wizard.

### Print Formatting Commands

Set left margin	CTRL-L (150/in, 150 default)
Set right margin	CTRL-R (1050 default, 7 inches)
Set top margin	CTRL-I (half lines, 10 default)
Set bottom margin	CTRL-D (half lines, 120 default)
Form length	CTRL-Y (132, 11 inches, default)
Line spacing	CTRL-A (2 default=single space)
Character spacing	CTRL-S (4800 per inch, 0 default)
Second left margin	CTRL-M (defaults 0, other
Second right margin	CTRL-N settings invoke 2 col)
Center line	CTRL-C....(cr)
Block right	CTRL-C+CTRL-C
Condensed print	CTRL-T (toggles)
Elongated print	CTRL-E (toggles)

Superscripts	CTRL-B (1/2 line up)
Subscripts	CTRL-F (1/2 line down)
Underline	CTRL-U (toggles)
Right justification	CTRL-J+0,off; +1,on
Header	CTRL-H....(cr) (if not first line, will skip first page)
Footer	CTRL-G....(cr)
Number pages	@ in header or footer
Start page No	1 CTRL-O+x (numbers first page x)
Eject (new) page	CTRL-F(cr)
Wait after page	CTRL-W
Chain disk file	(cr)CTRL-V+D:filename(cr)

### Disk and Printer Commands

Disk directory	OPTION-1 (or 2)
Delete disk file	OPTION-del/back space
Save file to disk	OPTION-S
Load file from disk	OPTION-L
Print file	OPTION-P

### Gross Cursor Movement

Home cursor	OPTION-T (Shift-Clear & CTRL-Clear also work)
Bottom of text	OPTION-B
Page cursor	OPTION-up and down arrows

### Manipulating Text

Insert text	Shift -Insert (toggles)
Delete text	All yellow keys-E (deletes from cursor down)
Move (M) block	START -M(D) (marks start) or SELECT-M(D) (marks end)
Duplicate (D) block	OPTION-M(D) (puts it in)

### Search/Replace

Define search phrase	START -S
Define replacement	START -R
Find search phrase	SELECT-S
Put in replacement	SELECT-R

### Continued from Page 4

point. My solution is to put two small rolls of masking tape, sticky side out, in the pocket; this holds the master so that I can print to within half an inch or so of the top. The tape takes a bit of adjusting, but then the fix lasts for months.

The above doesn't apply to letterheads, since there is no need to come near the top, so I have one without the tape. Actually, I have acquired two of each type, so that I can be slipping one page into a Paper Porter while I'm using the other for printing. This saves time on multi-page jobs.

All in all, I've found the Paper Porter a very satisfactory substitute for friction feed. It may not be adequate for everyone, but I think anybody considering getting friction feed for his printer ought to consider whether this inexpensive alternative might meet his needs.

The Paper Porter is made by Beeline Services, Otsego, 5718 Ponderosa, Stevensville, MI 49127, it sells for \$4.50, or \$3.25 in lots of five. Telephone orders are accepted; their number is 616-429-6461.

Ed. Note: An article similar to this has been submitted to COMPUTE! magazine. This article may not be reproduced or reprinted without the expressed permission of both the author and COMPUTE!



With the aquisition of a new Epson MX-80 and the newest version of Letter Perfect in hand that (supposedly) supports the new Grafrax Plus option, I was all set to get down to some serious word processing. While reading through the Letter Perfect manual, I found that it was possible to underline text, but subscript and superscript characters were replaced by Italic characters!! This was very disappointing since one of my main uses for the program would be for typing essays and reports for college courses. But, I needed the use of superscripts for footnotes. Further reading revealed that it was possible to insert "very special characters" for printer control codes. With a little experimenting, I found that it was possible to get sub/superscripts using the "vsc's" but when inserted in a large body of text, the character sequences look very confusing and are also very hard to remember. Since I rarely ever use subscripts, I came up with the following scheme for superscripting using the disk-printer editor of Letter Perfect. Although a few "vsc's" are still needed, this method eliminates a few key strokes and makes it easier to remember.

First, go to the disk-printer editor and hit option 1 for Epson MX-80 w/Grafrax. Step through the options until the options for subscripts and superscripts appear. Change the character sequence for superscripting to the following: 27,83,0. Then change the subscript characters to 27,84. If you have a need for subscripts instead, change the subscript characters to 27,83,1 and change the superscript characters to 27,84. Now that you have changed these characters, save your new printer driver on one of your text storage disks. (It only takes up one sector.) Now, whenever you boot Letter Perfect, press "D" when you are asked to "Select (EADDQ)".

The number of other special characters required depends on which font you will be printing in. If you will be using normal or condensed print (fonts 0 or 1), turn superscripts on by typing <cntrl-V>"^" and turn them off by typing <cntrl-V>"\*", <cntrl-V>"(27)", <cntrl-V>"H". The last two control sequences are needed to turn off the double strike mode which gets turned on when the printer goes into the script modes. When printing in emphasized mode (font 3), you must turn off emphasized mode before printing scripts. Turn superscripting on by typing <cntrl-V>"(27)", <cntrl-V>"F", <cntrl-V>"^". When turning the scripts off, you must also turn the double strike mode off (as in normal mode) AND turn the emphasized mode back on. Turn scripts off in emphasized mode by typing <cntrl-V>"\*", <cntrl-V>"(27)", <cntrl-V>"H", <cntrl-V>"(27)", <cntrl-V>"E". When typing in Double Strike and Emphasized mode (font 2), emphasized mode must, again, be turned off before scripts can be printed. Turn scripts on the same way as in emphasized mode; by typing <cntrl-V>"(27)", <cntrl-V>"F", <cntrl-V>"^". Turning scripts off is almost the same as emphasized mode with the exception that double strike mode does not have to be turned off. Turn scripts off in font 2 by typing <cntrl-V>"\*", <cntrl-V>"(27)", <cntrl-V>"E". Whew!! That was as tough for me to write as it was for you to read!! The following table should make things a little easier to read.

In Normal or Condensed modes(fonts 0 or 1):

<cntrl-V>"^" - superscripts on  
<cntrl-V>"\*", <cntrl-V>"(27)", <cntrl-V>"H" - superscripts off

In Emphasized mode (font 3):

<cntrl-V>"(27)", <cntrl-V>"F", <cntrl-V>"^" - superscripts on  
<cntrl-V>"\*", <cntrl-V>"(27)", <cntrl-V>"H", <cntrl-V>"(27)", <cntrl-V>"E" - superscripts off

In Double Strike and Emphasized mode (font 2):

<cntrl-V>"(27)", <cntrl-V>"F", <cntrl-V>"^" - superscripts on  
<cntrl-V>"\*", <cntrl-V>"(27)", <cntrl-V>"E" - superscripts off

This is Superscripting in normal print mode

This is Superscripting in condensed print

This is Superscripting in emphasized print mode

This is Superscripting in double strike and emphasized (superduper) mode

If you are using subscripts, just switch <cntrl-V>"^" for <cntrl-V>"\*" and vice versa. Using this method has the disadvantage that you now have to insert special characters in order to get Italic print. But, so far this is the easiest way I have found to produce script characters. If anyone has come up with an easier way to do scripts, please let the rest of us know!!



DON'T FORGET

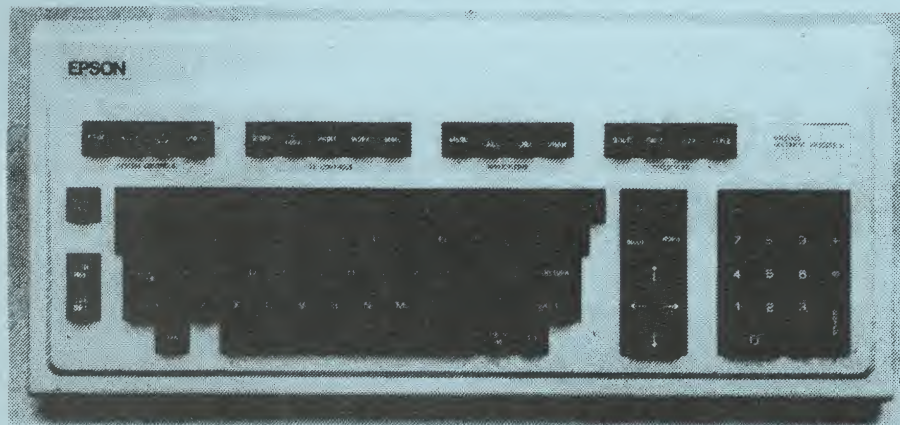
J A C G BULLETIN BOARD

(201) 377-4084

Monday-Sunday: 9:00pm - 9:00am



# Coming Soon to Earthrise EPSON QX-10



## *The computer that makes you feel smarter*

The Epson QX-10 was conceived, designed, engineered and built with just one thought in mind: to vastly expand your ability to see, to think, to create with a system that acts as a natural extension of the human mind.

It's a computer for people who think. And who want to think better.

Standard with QX-10 are the following software capabilities:

- Word Processor • Scheduling • Calculating
- Filing • Electronic Mail • Graphics • CP/M Compatibility

### SPECIFICATIONS

Main Memory - 256K RAM

Display - 12" Green Monochrome High Resolution Monitor

Mass Storage - Two 5¼", Double Sided Floppy Disk Drives: 340K/Disk

Detachable Keyboards - ASC II & HASC I

(Human Applications Standard Computer Interface)

Interfaces - RS-232 Programmable

Printer - Standard Parallel

*Call today and make an appointment for*

**FREE DEMONSTRATION**

**EARTHRISE**

# COMPUTER CENTER

*Your Authorized Epson Computer Dealer*  
6 Green Village Rd., Madison 377-4084



#####  
# J A C G #  
# JERSEY ATARI COMPUTER GROUP #  
# 58 DEWEY AVENUE #  
# HIGH BRIDGE, NEW JERSEY 08829 #  
#####

FIRST CLASS MAIL

JACG NEWSLETTER-VOLUME 2-NUMBER 6  
FEBRUARY 1983

JACG OFFICERS

President: Richard Kushner 58 Dewey Avenue High Bridge, NJ 08829 (201)638-8732 (home) (201)582-4794 (work)	Librarians: Don Ursem (Disk) 37 Clover Lane Randolph, NJ 07869 (201)895-2522 (home)	
Vice Pres: Dennis Kushler 45 Mountain Avenue Summit, NJ 07901 (201)273-7588 (home)	Secretary: Ed Picciuti 90 Mountain Avenue Cedar Knolls, NJ 07927 (201)267-7745 (home)	Treasurer: Rick Olson 5 Starling Drive Randolph, NJ 07869 (201)366-6862 (home)
Editor: Art Leyenberger 40 Lawrence Road Parsippany, NJ 07054 (201)887-2861 (home) (201)386-4254 (work)	Advertising: Herb Lehner 1375 Blair Ct. Bridgewater, NJ 08807 (201)725-9394 (home)	Programs: Richard Rospond (201)635-2936 (home)

The Jersey Atari Computer Group (JACG) is an independent, informal organization of Atari computer users. It is not affiliated with Atari or any other commercial organization. Any logos, trademarks or company names are used either with permission or as an informal way of referring to a product or organization. Opinions expressed in this publication reflect only the views of the individual author, and do not necessarily represent the views of JACG. Material in this Newsletter may be reprinted by other Atari User Groups provided that JACG and author (if applicable) are given credit and the issue date is given. Only original work may be reprinted. Questions concerning reprinting should be addressed to the Editor.